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| APPLICATION NO.           | IO. FILING DATE       |            | FIRST NAMED INVENTOR      | ATTORNEY DOCKET NO. | CONFIRMATION NO |  |
|---------------------------|-----------------------|------------|---------------------------|---------------------|-----------------|--|
| 09/658,280                | 09/658,280 09/08/2000 |            | Hironobu kageyama         | 1341.1061/JDH 3557  |                 |  |
| 21171                     | 7590                  | 02/12/2003 |                           |                     |                 |  |
| STAAS & H                 | ALSEY I               | LLP        | EXAMINER                  |                     |                 |  |
| 700 11TH STI<br>SUITE 500 | •                     |            | RIOS CUEVAS, ROBERTO JOSE |                     |                 |  |
| WASHINGTO                 | ON, DC 2              | 20001      |                           | ART UNIT            | PAPER NUMBER    |  |
|                           |                       |            |                           | 2836                |                 |  |

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Applicati  | n No.  | Applicant(s)   |                           |  |  |  |  |
|---|---|--|--|--|---------------------------|--|--|--|--|
|   |   | 09/658,280   |  | KAGEYAMA, HIRONOBU   |                           |  |  |  |  |
| Office Action Su  | ımmary  | Examin r   |  | Art Unit   |                           |  |  |  |  |
|   |   | Roberto J  |  | 2836   |                           |  |  |  |  |
| The MAILING DATE of Period for Reply  | this c mmunication  | n appears on the   | c ver sheet with t   | he c rresp ndence add  | ress                      |  |  |  |  |
| A SHORTENED STATUTOR THE MAILING DATE OF THI:  - Extensions of time may be available un after SIX (6) MONTHS from the mailing.  - If the period for reply specified above is.  - If NO period for reply is specified above.  - Failure to reply within the set or extend.  - Any reply received by the Office later the earned patent term adjustment. See 37 | S COMMUNICATION der the provisions of 37 Cm date of this communication less than thirty (30) days, ethe maximum statutory per period for reply will, by the period for reply will, by the period for the | ON. FR 1.136(a). In no events on. The areply within the state opinion will apply and wistatute, cause the apple. | ent, however, may a reply but ory minimum of thirty (30 II expire SIX (6) MONTHS ication to become ABAND | be timely filed ) days will be considered timely, from the mailing date of this comONED (35 U.S.C. § 133). | nmunication.              |  |  |  |  |
| 1) Responsive to commu  | nication(s) filed on  | 22 November 2  | <u> 2002</u> .   |  |                           |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> .  | 2b)   | This action is   | non-final.   |  |                           |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |   |  |  |  |                           |  |  |  |  |
| 4)⊠ Claim(s) 2 and 3 is/are   | pending in the app  | plication.   |  |  |                           |  |  |  |  |
| 4a) Of the above claim(   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |                           |  |  |  |  |
| 5) Claim(s) is/are a  | llowed.   |  |  |  |                           |  |  |  |  |
| 6)⊠ Claim(s) <u>2 and 3</u> is/are  | rejected.   |  |  |  |                           |  |  |  |  |
| 7) Claim(s) is/are o  | bjected to.   |  |  |  |                           |  |  |  |  |
| 8) Claim(s) are sub   | ject to restriction a   | and/or election re   | equirement.  |  |                           |  |  |  |  |
| Application Papers  |   |  |  |  |                           |  |  |  |  |
| 9)☐ The specification is obje   | cted to by the Exa  | miner.   |  |  |                           |  |  |  |  |
| 10)☐ The drawing(s) filed on _  | is/are: a)□ :   | accepted or b)□  | objected to by the E   | Examiner.  |                           |  |  |  |  |
| Applicant may not reque   |   |  |  |  |                           |  |  |  |  |
| 11)⊠ The proposed drawing c   |   |  |  | ed b)⊡ disapproved by  | the Examiner              |  |  |  |  |
| If approved, corrected dr   |   |  | fice action.   |  |                           |  |  |  |  |
| 12) ☐ The oath or declaration i   | s objected to by th   | e Examiner.  |  |  |                           |  |  |  |  |
| Priority under 35 U.S.C. §§ 119   | and 120   |  |  |  |                           |  |  |  |  |
| 13)⊠ Acknowledgment is ma   | de of a claim for fo  | reign priority un  | der 35 U.S.C. § 11   | 9(a)-(d) or (f).   |                           |  |  |  |  |
| a)⊠ All b)☐ Some * c)☐  | None of:  |  |  |  |                           |  |  |  |  |
| 1. Certified copies of  | f the priority docur  | ments have bee   | n received.  |  |                           |  |  |  |  |
| 2. Certified copies of  | f the priority docur  | ments have bee   | received in Appli  | cation No  |                           |  |  |  |  |
|   | om the Internationa   | al Bureau (PCT   | Rule 17.2(a)).   | eived in this National S   | tage                      |  |  |  |  |
| 14) Acknowledgment is made  |   |  | •  |  | application)              |  |  |  |  |
| a) ☐ The translation of th  | ne foreign language   | e provisional ap   | plication has been   | received.  | .pp.iioaiioiii <i>j</i> . |  |  |  |  |
| Attachment(s)   |   | , , ,  | 33   |  |                           |  |  |  |  |
| 1) Notice of References Cited (PTO-8: 2) Notice of Draftsperson's Patent Dra 3) Information Disclosure Statement(s  | wing Review (PTO-948  |  |  | mary (PTO-413) Paper No(s) nal Patent Application (PTO-  |                           |  |  |  |  |
| S. Patent and Trademark Office<br>PTO-326 (Rev. 04-01)  | Offi  | ice Action Summar  | у  | Part of F  | Paper No. 7               |  |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Linde (US patent 5,745,670) and Kim\* (US patent 5,886,424).

  \*Reference is provided to further support the Examiner's official notice traversed by applicant.

As per claim 2, AAPA (Figure 5) teaches all the limitations except the control unit being also powered by the control power supply unit of another power supply unit.

However, Linde teaches a power supply device comprising a plurality of power supply units (12, 12'...) parallel connected, wherein each power supply unit comprises a control unit (30) receiving power form an internal supply (12) and from the internal supplies of other power supply units through a power bus (Figure 3, col. 5, line 13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of AAPA with the teachings of Linde such that the control unit is also powered by the control power supply unit of another power supply unit for the purpose of enabling the control units to function independent of the operational condition of the internal supply.

Moreover, Linde teaches the control unit receiving inputted controlling voltage supply (power line 24) but does not specifically disclose a converting unit for outputting

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said received voltage to said control unit. However, the Examiner takes official notice that Linde's control unit inherently comprises a voltage converting unit that receives the voltage form line (24) and supplies a constant controlling voltage supply (DC) to the logic controlling gates (Figure 3). It is well known in the art that logic-controlling gates such as ANDs, OpAmps and Inverters require a constant and particular operating voltage (Vcc). In most electronic devices a voltage converter receives at least one input voltage and provides the required operating voltages. \*Kim teaches a power supply unit, wherein a voltage converter (24) is inserted in an upstream side of a logic control circuit (25) for providing a plurality of constant operating voltages (col. 5, lines 53-61; col. 4, lines 17-22).

As per claim 3, the combination of AAPA (Figure 5) in view of Linde teaches providing rush current prevention circuits (14) and (16) in the downstream side of the main power supply unit and the control power supply unit respectively for preventing a rush current from flowing into the power units. Furthermore, AAPA (Figure 6) teaches that rush current prevention circuit (42) could be provided upstream the control unit for preventing a rush current from flowing into the control unit. Thus, it would have been obvious to one of ordinary skill in the art to provide all of said rush current prevention circuits for the purpose of completely isolating the power supply units from inrush currents that could damage the power supply units.

## Response to Arguments

3. Applicant's arguments filed 11/22/2002 have been fully considered but they are not persuasive.

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Applicant argues that Linde's control unit does not inherently comprise a voltage-converting unit that receives the voltage from line (24) and supplies a constant controlling voltage supply the logic controlling gates. It is well known in the art that logic-controlling gates such as ANDs, OpAmps and Inverters require a constant and particular operating voltage (Vcc). In most electronic devices a voltage converter receives at least one input voltage and provides the required operating voltages. A prior art reference has been provided to further support the Examiner's position as traversed by the applicant.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, Linde teaches the control unit (30) receiving power from power supply (12) through rush current prevention unit (14) and power line (24). In addition, Linde teaches said control unit (30) receiving power through power line (24) from other power supplies (12', 12"...) that are parallel coupled through power bus (44). Moreover, Linde discloses that said configuration is provided such that the control unit (30) will be able to function independent of the operational condition of the local power supply (col. 5, line). It is important to point out that Linde's local power supply (12) serves as the

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main power supply unit for the load and the control power supply unit for the control unit

as shown in Figure 3.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Communication with PTO

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone number is

(703) 308-0956. Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Roberto Rios whose telephone number is (703)

306-5518. In the event that Examiner Rios cannot be reached, his supervisor, Brian

Sircus may be contacted at (703) 308-3119. The fax number for Before-Final

communications is (703) 872-9318, for After-Final communications is (703) 872-9319,

and for Customer Service is (703) 872-9317.

SUPERVISORY PATENT EXAMINER

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Roberto J. Rios Patent Examiner